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BRUCE of New York City gave an endowment-fund of \$25,000; (Miss BRUCE, a member of this Society, had already given \$50,000 to provide the photographic telescope for Harvard College Observatory). Other subscriptions amounting to nearly \$19,000 have been received, mostly from the children of Messrs. OLCOTT and PRUYN, once Trustees of the original observatory. The new site is said to be entirely satisfactory. The plans for the buildings have been prepared by Professor Boss himself. A new 12-inch equatorial has been provided; and the former meridian-circle will be improved in several respects, and mounted and housed in the best manner. The rough cut herewith shows the general appearance of the observatory and the observers' house. The building for the meridian-circle is behind these structures, and is hidden by them. To complete the equipment, some \$6,000 more are required, which will, no doubt, be provided in due time. The new DUDLEY Observatory has been built to do a definite class of work entirely on the plans of the astronomer who has the work to do. It is hoped to be ready for work in the autumn of 1893. Even this inadequate account of the new institution will, no doubt, be welcome to those who know how much is to be expected from it. E. S. H.

PHOTOGRAPHING THE CORONA WITHOUT AN ECLIPSE.

Several years ago Dr. HUGGINS made a series of experiments to determine whether it is possible to photograph the solar corona without an eclipse of the Sun. The difficulties to be overcome do not arise so much from the presence of the intensely brighter photosphere as from the fact that to all appearances the diffused light in our own atmosphere during full sunshine is stronger than the light of the corona. Dr. HUGGINS was hopeful of finding that in some region in the photographic part of the spectrum the light of the corona would exceed that of the sky. If only that part of the spectrum were used to photograph the Sun's surroundings, the contrast between the corona and the sky would permit the coronal outlines to be registered on the negative. By interposing colored glass screens between the lens and sensitive plate different parts of the spectrum were successively employed, and the best results were obtained by using only the blue rays. The images on some of his plates strikingly resembled the corona in form; but it was not certain whether they were coronal or false images due to instrumental defects.

In a recent number of the *Comptes Rendus* M. DESLANDRES of Paris describes some experiments made by him having the same object in view. He employed two prisms which were exactly alike, placing them at a considerable distance apart, with their refracting edges parallel but the base of one turned in a direction opposite that of the base of the other. The sunlight which passed through the first prism was decomposed, and a small portion of the spectrum thus formed was allowed to fall on the second prism. Passing through the prisms and a lens, the image of the Sun and its surroundings was formed on the sensitive plate and photographed. By suitably moving the second prism images of all colors could be formed on the plate. When the ultra-violet portion of the spectrum was used, M. DESLANDRES found that coronal forms were photographed; but whether they were truly coronal or of instrumental origin he was unable to say. Professor HALE of Chicago made similar attempts last year, using the same general principles, and arrived at exactly the same results. He is now having constructed an instrument with which to continue the experiments, and he hopes to obtain results of practical value.

Our present limited knowledge of the corona depends upon observations made at eclipses with great haste and inconvenience. The experiments made by Messrs. HUGGINS, DESLANDRES and HALE do not offer much encouragement that the corona can be photographed and studied at our leisure. Successful results in this work would be extremely valuable: not only would our knowledge of the Sun be rapidly extended, but astronomers would largely be relieved from the responsibility of expensive and perilous voyages to observe eclipses. W. W. C.

CLASSIFICATION OF STELLAR SPECTRA.

Prof LOCKYER has communicated to the Royal Society a discussion of 443 photographs of 171 bright stars which have been obtained at Kensington and Westgate-on-Sea during the past two years. The spectra were formed by placing prisms of 7½° and 45°, at different times, in front of the object-glass of a 6-inch refracting telescope. The discussion is based primarily upon the amount of continuous absorption in the violet end of the spectra. The varying thickness of the hydrogen and other lines is also taken into account, and several very interesting facts come out of the classification of the spectra. Thus, stars which show